

Notice of Allowability

Application No.

09/995,474

Examiner

Dhairya A. Patel

Applicant(s)

GRECH ET AL.

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/10/2006.
2. ☒ The allowed claim(s) is/are
1, 23, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 17, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 35, 36, 39, 42, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 57, 61, 64, 65.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

ZARNI MAUNG

SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Anne Davis Barry (Reg. # 47,408) on 6/26/2006.

3. The application has been amended as follows:

In the Claims

Please **AMEND** claims 1,5,17,20,21,23,27,39,42,43,45,49,61,64,65 in accordance with the following:

1). (currently Amended) A method for performing isolation of dropped packets, said method comprising:

receiving a request to isolate a dropped packet in a network, said request including a source node and a destination node;

mapping an expected route between the source node and the destination node, said expected route including a probe in an active mode;

creating a capture filter profile for said probe, said capture filter profile including instructions to cause said probe to simulate network errors;

transmitting a request to said probe to perform data collection in response to said capture filter profile;

receiving said data collection request at said probe;

programming said probe in response to said capture filter profile;

receiving a data log from said probe, said data log created by said data collection;

generating exception data including comparing said expected route to said data log, said generating exception data further includes generating output data that includes the number of log entries corresponding to said probe and the number of log entries corresponding to a second probe, wherein said log entries are contained in said data log, and wherein said probe is a source probe and said second probe is a destination probe and tracking a packet from said source node to said destination node using a boolean expression and generating output data that includes the results of said tracking;

isolating the dropped packet by identifying a failing network element along the expected route in response to the exception data;

capturing packet data for a time period specified by said capture filter profile;

writing a packet data identifier to said data log when said packet data matches said capture filter profile; and

transmitting said data log to requestor of said data collection.

5) (Currently Amended) The method of claim 1 wherein said capture filter profile further includes said source node and said destination node.

17) (Currently Amended) The method of claim 1 wherein said probe is in a passive mode.

20) (Currently Amended) The method of claim 1 further comprising:
capturing packet data for every packet received by said probe.

21) (Currently Amended) The method of claim 1 further comprising:

capturing packet data on a continuous basis at said probe.

23) (Currently Amended) A system for performing isolation of dropped packets in a network, said system comprising a problem isolation system in communication with said network, said problem isolation system implementing a process comprising:

receiving a request to isolate a dropped packet in a network, said request including a source node and a destination node;

mapping an expected route between the source node and the destination node, said expected route including a probe in an active mode;

creating a capture filter profile for said probe, said capture filter profile including instructions to cause said profile to simulate network errors;

transmitting a request to said probe to perform data collection in response to said capture filter profile;

receiving said data collection request at said probe;

programming said probe in response to said capture filter profile;

receiving a data log from said probe, said data log created by said data collection;

generating exception data including comparing said expected route to said data log, said generating exception data further includes generating output data that includes the number of log entries corresponding to said probe and the number of log entries corresponding to a second probe, wherein said log entries are contained in said data log, and wherein said probe is a source probe and said second probe is a destination

probe and tracking a packet from said source node to said destination node using a boolean expression and generating output data that includes the results of said tracking;

isolating the dropped packet by identifying a failing network element along the expected route in response to the exception data;

capturing packet data for a time period specified by said capture filter profile;

writing a packet data identifier to said data log when said packet data matches said capture filter profile; and

transmitting said data log to requestor of said data collection.

27) (Currently Amended) The system of claim 23 wherein said capture filter profile further includes said source node and said destination node.

39) (Currently Amended) The system of claim 23 wherein said probe is in a passive mode.

42) (Currently Amended) The system of claim 23 further comprising:

capturing packet data for every packet received by said probe.

43) (Currently Amended) The system of claim 23 further comprising:

capturing packet data on a continuous basis at said probe.

45) (Currently Amended) A storage medium encoded with machine-readable computer program code for performing isolation of dropped packets, the storage medium storing instructions for causing a problem isolation system to implement a method comprising:

receiving a request to isolate a dropped packet in a network, said request including a source node and a destination node;

mapping an expected route between the source node and the destination node,
said expected route including a probe in an active mode;

creating a capture filter profile for said probe, said capture filter profile including instructions to cause said profile to simulate network errors;

transmitting a request to said probe to perform data collection in response to said capture filter profile;

receiving said data collection request at said probe;

programming said probe in response to said capture filter profile;

receiving a data log from said probe, said data log created by said data collection;

generating exception data including comparing said expected route to said data log, said generating exception data further includes generating output data that includes the number of log entries corresponding to said probe and the number of log entries corresponding to a second probe, wherein said log entries are contained in said data log, and wherein said probe is a source probe and said second probe is a destination probe and tracking a packet from said source node to said destination node using a boolean expression and generating output data that includes the results of said tracking;

isolating the dropped packet by identifying a failing network element along the expected route in response to the exception data;

capturing packet data for a time period specified by said capture filter profile;

writing a packet data identifier to said data log when said packet data matches said capture filter profile; and

transmitting said data log to requestor of said data collection.

49) (Currently Amended) The storage medium of claim 45 wherein said capture filter profile further includes said source node and said destination node.

61) (Currently Amended) The storage medium of claim 45 wherein said probe is in a passive mode.

64) (Currently Amended) The storage medium of claim 45 further comprising: capturing packet data for every packet received by said probe.

65) (Currently Amended) The storage medium of claim 45 further comprising: capturing packet data on a continuous basis at said probe.

Allowable Subject Matter

4. Claims 1,2,3,4,5,6,7,8,9,10,11,13,14,17,20,21,23,24,25,26,27,28,29,30,31,32, 33,35,36,39,42,43,45,46,47,48,49,50,51,52,53,54,55,57,58,61,64,65 respectively are allowed which are renumbered as 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18, 19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46, 47,48 respectively. Original claims 12,15,16,18,19,22,34,37,38,40,41,44,56 ,59,60,62,63,66 are cancelled.

The following is an examiner's statement of reasons for allowance: capture filter profile including instructions to cause said profile to simulate network errors and programming said probe in response to said capture filter profile and generating output data that includes the number of log entries corresponding to said probe and the number of log entries corresponding to a second probe, wherein said log entries are contained in said data log, and wherein said probe is a source probe and said second

probe is a destination probe and tracking a packet from said source node to said destination node using a boolean expression and generating output data that includes the results of said tracking.

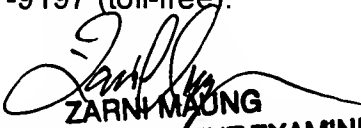
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dhairya A. Patel whose telephone number is 571-272-5809. The examiner can normally be reached on 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


ZARNI MAUNG
SUPERVISORY PATENT EXAMINER

DAP